DOCUMENT RESUME

ED 177 346 CE 023 033

AUTHOR	Savell, Joel M.; And Others
TITLE	Male and Female Soldiers' Beliefs about the "Appropriateness" of Various Jobs for Women in the Army.
INSTITUTION	Army Research Inst. for the Behavioral and Social Sciences, Alexandria, Va.
SPONS AGENCY	Office of the Deputy Chief of Staff for Personnel (Army), Washington, D.C.
REPORT NO	ARI-TP-352
PUB DATE	Aug 79
NOTE	26p.
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Armed Forces; *Attitudes; Enlisted Personnel; *Females; *Jobs; *Military Personnel; Military Service; *Nontraditional Occupations; *Sex Role; Sex Stereotypes; Technical Reports
IDENTIFIERS	Army; *United States

ABSTRACT

A study was conducted to (1) document the expanding role of women in the U.S. Army and (2) determine whether soldiers in 1974 believed that certain military jobs were appropriate for women and whether those beliefs were related to respondent sex, rank, and expectation of leaving the army before retirement. An examination of army records revealed that in 1945 women made up about 2.6% of the army, for the next 25 years about 1-2%, and by 1976 about 6%. From December 1973 to December 1975 the number of enlisted women increased 131% while the number of enlisted women in traditionally female jobs increased 100% and in nontraditional jobs 2,000%. Data on soldiers' beliefs about job appropriateness was obtained from answers to twenty-four items that were part of a larger questionnaire administered in 1974 to approximately 800 male and female soldiers. Out of twenty-four traditional and nontraditional jobs under consideration, only one, rifle-carrying foot soldier, was considered by a majority of both male and female soldiers to be inappropriate for women. Respondents' judgments were strongly related to their sex and amount of education; for example, women and those with more education more often judged nontraditional jobs to be appropriate for women. (LRA)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED177346

Technical Paper 352

MALE AND FEMALE SOLDIERS' BELIEFS ABOUT THE "APPROPRIATENESS" OF VARIOUS JOBS FOR WOMEN IN THE ARMY

Joel M. Savell and John C. Woelfel
Army Research Institute for the Behavioral and Social Sciences

and

Barry E. Collins and Peter M. Bentler
University of California, Los Angeles

Submitted by:
T. O. Jacobs, Chief
LEADERSHIP AND MANAGEMENT TECHNICAL AREA

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Approved by:

E. Ralph Dusek
PERSONNEL AND TRAINING
RESEARCH LABORATORY

CE 023 033

U.S. ARMY RESEARCH INSTITUTE FOR THE BEHAVIORAL AND SOCIAL SCIENCES
5001 Eisenhower Avenue, Alexandria, Virginia 22333

Office, Deputy Chief of Staff for Personnel
Department of the Army

August 1979

Army Project Number
2Q762717A767

Women in the Army

Approved for public release; distribution unlimited.

U. S. ARMY RESEARCH INSTITUTE FOR THE BEHAVIORAL AND SOCIAL SCIENCES

A Field Operating Agency under the Jurisdiction of the Deputy Chief of Staff for Personnel

JOSEPH ZEIDNER
Technical Director

WILLIAM L. HAUSER
Colonel, U S Army
Commander

NOTICES

DISTRIBUTION: Primary distribution of this report has been made by ARI. Please address correspondence concerning distribution of reports to: U. S. Army Research Institute for the Behavioral and Social Sciences, ATTN: PERI-P, 5001 Eisenhower Avenue, Alexandria, Virginia 22333.

FINAL DISPOSITION: This report may be destroyed when it is no longer needed. Please do not return it to the U. S. Army Research Institute for the Behavioral and Social Sciences.

NOTE: The findings in this report are not to be construed as an official Department of the Army position, unless so designated by other authorized documents.

ARI Research Reports and Technical Papers are intended for sponsors of R&D tasks and other research and military agencies. Any findings ready for implementation at the time of publication are presented in the latter part of the Brief. Upon completion of a major phase of the task, formal recommendations for official action normally are conveyed to appropriate military agencies by briefing or Disposition Form.

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE

READ INSTRUCTIONS BEFORE COMPLETING FORM

1. REPORT NUMBER: Technical Paper 352

2. GOVT ACCESSION NO.:

3. RECIPIENT'S CATALOG NUMBER:

4. TITLE (and Subtitle): MALE AND FEMALE SOLDIERS' BELIEFS ABOUT THE "APPROPRIATENESS" OF VARIOUS JOBS FOR WOMEN IN THE ARMY

5. TYPE OF REPORT & PERIOD COVERED: --

6. PERFORMING ORG. REPORT NUMBER: --

7. AUTHOR(s): Joel M. Savell, John C. Woelfel, Barry E. Collins, and Peter M. Bentler

8. CONTRACT OR GRANT NUMBER(s): --

9. PERFORMING ORGANIZATION NAME AND ADDRESS: U.S. Army Research Institute for the Behavioral and Social Sciences (PERI-IM) 5001 Eisenhower Avenue, Alexandria, VA 22333

10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS: 2Q762717A767

11. CONTROLLING OFFICE NAME AND ADDRESS: Deputy Chief of Staff for Personnel Washington, DC 20310

12. REPORT DATE: August 1979

13. NUMBER OF PAGES: 18

14. MONITORING AGENCY NAME & ADDRESS(if different from Controlling Office): --

15. SECURITY CLASS. (of this report): Unclassified

15a. DECLASSIFICATION/DOWNGRADING SCHEDULE: --

16. DISTRIBUTION STATEMENT (of this Report): Approved for public release; distribution unlimited.

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report): --

18. SUPPLEMENTARY NOTES: A paper discussing the results of this research was presented at the 39th Annual Meeting of the Southern Sociological Society, April 1976.

19. KEY WORDS (Continue on reverse side if necessary and identify by block number): Women in the Army; Attitudes

20. ABSTRACT (Continue on reverse side if necessary and identify by block number):

This research (1) documented the expanding role of women in the U.S. Army and (2) collected evidence regarding one aspect of the reaction which soldiers in 1974 may be viewed as having had to this expansion--specifically, the extent to which soldiers at that time believed certain jobs were "appropriate" for women and the extent to which these beliefs were related to such things as military rank, sex, length of service, and expectation of leaving the Army before retirement.

(Continued)

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

Item 20 (Continued)

To obtain data on the expanding role of women in the Army, we examined the appropriate Army records. To obtain data on soldiers' beliefs about job appropriateness, we examined responses to 24 items from a larger set of items included in a questionnaire we administered in 1974 to approximately 800 male and female soldiers (both officers and enlisted) at three CONUS installations. The results of this investigation are summarized below.

When soldiers were asked in 1974 which jobs (out of 24 that were presented) they thought were and were not appropriate for women, the majority of soldiers of both sexes said that--with one exception ("rifle-carrying infantry foot soldier")--they thought all the jobs presented were appropriate. These judgments were strongly related to respondents' educational level and sex, with soldiers who had had more years of formal education more often judging the jobs appropriate than soldiers with fewer years of formal education and with women more often judging the jobs appropriate than men. There was no evidence that these judgments were related to respondents' military rank (when educational level was controlled), length of time in the Army, or intention of making the Army a career.

FOREWORD

The Army Research Institute for the Behavioral and Social Sciences (ARI) has responded over the past years with a number of efforts to meet concerns expressed in the Office of the Deputy Chief of Staff for Personnel regarding the consequences of increasing the proportion of women in the Army and of extending the range of jobs that these women would perform. One of the earlier efforts, the research reported here, was begun in 1972 under Army Project 2Q062106A740 and completed under Project 2Q762717A767.

Some of the data presented here were collected by Contemporary Research, Incorporated, under Contract DAHC19-73-C-0064 and discussed in ARI Research Memorandum 75-3. A paper discussing the results of this research was also presented at the 39th Annual Meeting of the Southern Sociological Society, April 1976.

JOSEPH ZEIDNER
Technical Director

MALE AND FEMALE SOLDIERS' BELIEFS ABOUT THE "APPROPRIATENESS" OF VARIOUS JOBS FOR WOMEN IN THE ARMY

BRIEF

Requirement:

In view of the expansion of women's role in the U.S. Army, to learn, in 1974, the extent to which soldiers believed certain jobs were "appropriate" for women and the extent to which these soldiers' beliefs were related to such factors as their sex, military rank, length of service, and career plans.

Procedure:

Army records provided documentation on the changing role of women in the Army. Data on soldiers' beliefs about job appropriateness were obtained from answers to 24 items that were part of a larger questionnaire administered in 1974 to approximately 800 male and female soldiers (both officer and enlisted) at three Army installations in the United States.

Findings:

In 1945 women made up about 2.6% of the Army, for the next 25 years about 1-2%, and by 1976 about 6%. From December 1973 to December 1975 the number of enlisted women (EW) increased 131%, while the number of EW in traditionally female jobs increased 100% and in nontraditional jobs 2,000%.

Out of 24 traditional and nontraditional jobs under consideration, only one, "rifle-carrying foot soldier," was considered by a majority of the soldiers to be inappropriate for women. Respondents' judgments were strongly related only to their sex and amount of education: women and those with more education more often judged nontraditional jobs to be appropriate for women.

Utilization of Findings:

This early attitude research indicates a basic degree of support by Army personnel for the current Army policy of equal opportunity for women in all military occupational specialties except those in the combat arms.

MALE AND FEMALE SOLDIERS' BELIEFS ABOUT THE "APPROPRIATENESS" OF VARIOUS JOBS FOR WOMEN IN THE ARMY

CONTENTS

	Page
INTRODUCTION	1
INVESTIGATION OF SOLDIERS' BELIEFS ABOUT JOB APPROPRIATENESS	4
Source of the Data Reported Here	4
Description of the Sample	4
Results	5
Final Note Concerning the Validity of the Data	12
REFERENCES	15
DISTRIBUTION	17

LIST OF TABLES

Table 1.	Percentage and number of enlisted women in traditional and nontraditional MOS categories by year	3
2.	Percentage of respondents perceiving jobs as appropriate for women, overall, by rank, and by sex	6
3.	Difference in the percentage of officers and enlisted personnel who judged specified jobs to be appropriate for women	7
4.	Differences in the percentages of officer and enlisted personnel who judged jobs appropriate for women, shown separately for the total sample, for high school graduates, and for those with 1 to 3 years of college	8
5.	Difference in the percentage of men and women who judged jobs to be appropriate for women, shown for those jobs (N = 9) for which the difference was significant	9
6.	Differences in the percentages of men and women who judged the jobs appropriate for women, shown separately for the total sample, for high school graduates, and for those with 1 or more years of college	11

MALE AND FEMALE SOLDIERS' BELIEFS ABOUT THE "APPROPRIATENESS" OF VARIOUS JOBS FOR WOMEN IN THE ARMY

The purpose of this paper is to document the often discussed (Coates, 1965; Goldman, 1973) and recently initiated expansion of women's role in the U.S. Army and to present evidence regarding one aspect of soldiers' probable reaction to this expansion--the extent to which soldiers believe certain military jobs are "appropriate" for women and, in particular, the extent to which these beliefs are related to respondent sex, rank, and expectation of leaving the Army before retirement.

INTRODUCTION

At the end of World War II there were about 156,000 women soldiers on active duty (about 2.6% of the total number of soldiers).[1] After the war there was rapid demobilization, and by the middle of 1948 the number of women was down to approximately 8,000--about 1.4% of the total. There was a temporary increase to just over 18,000 (1.1%) at the time of the Korean War, but by June 1958 the figure was back down to fewer than 12,000 (1.3%). And while there was an increase during the 1960s, as late as June 1972 the figure was still below 17,000 (2.1%). In 1972, however, there began a series of actions, the final results of which cannot yet be seen clearly but which in only a few years has raised the proportion of women in the Army to the point where it is now greater than it has been at any other time in this country's history.

One of the first of these actions was the formulation by the Defense Department of what was called a "contingency plan"--a plan for bringing more women into the Army and for employing them more widely in the event the all-volunteer/no-draft environment failed to produce enough qualified men. In a memorandum dated April 6, 1972, Assistant Secretary of Defense William Brehm requested the military departments to "eliminate all unnecessary distinction in regulations applying to women . . . . As a guiding principle, women must be given equal opportunity and treatment." In the Army, two immediate actions in response to this request were to set a goal of having 50,000 women in the active Army by June 1979 and to open to women a large number of jobs that

---

[1] Manpower statistics in this paragraph were taken from Selected Manpower Statistics, Department of Defense, OASD (Comptroller), Directorate for Information Operations, May 1976. Numbers and percentages of women in various job categories were calculated from figures provided in Strength of the Army, DCSPER-46 (December 1973, December 1974, and December 1975). For a discussion of the Army's use of women soldiers during World War II, see Treadwell (1954).

previously had been closed to them. The effect of these various actions on the recruitment of women was dramatic. By December 1973 the number of women in the Army had risen to 25,000 (3.2%); by December 1974 the number had risen to 38,000 (5%); and at the time of this writing (April 1976) there were approximately 46,000 women in the Army--approximately 6% of the total.

Not only are there more women joining the Army than there have been since World War II (making a higher percentage of the total number of soldiers), but there are also more women working in jobs that previously were largely or exclusively the domain of men. To illustrate, Table 1 shows the number and percentage of enlisted women who, in December 1973, December 1974, and December 1975 were working in what we have called "traditionally female" and "not traditionally female" military occupational specialties (MOS).[2]

The data in Table 1 show that during this 24-month period, when the total number of enlisted women increased by 131% (from 13,397 to 30,965), the number of women who were in traditional jobs increased by only 100%, while the number of women who were in nontraditional jobs increased by nearly 2,000% (from 176 to 3,688). This means that the distribution of enlisted women shifted during this period in the direction of greater relative representation in the nontraditional job areas.

Table 1 shows that the percentage of the female enlisted population who were in traditional jobs declined by 14% between 1973 and 1975, while the percentage of this population who were in nontraditional jobs during this period rose 11%. A particularly striking example of this latter shift is the increase in the percentage of enlisted women who were in maintenance and law enforcement job categories--increases of 1,300% and 700%, respectively. The number of women in these job categories is still very small, both in absolute terms (1,294 in maintenance and 1,263 in law enforcement) and as a percentage of the total number of soldiers holding these jobs (5.8% and 1.3%, respectively).

The difference between these figures and the corresponding figures for the 2 previous years, however, suggests that in the years ahead there are likely to be more and more women turning to jobs we have classified as "not traditionally female." Given this recent and projected increase in both the number and the percentage of women in Army

---

[2]The following procedure was used in classifying MOS as traditional and nontraditional: First, we grouped the MOS into MOS categories or "career management fields" as described in the relevant Army document (DCSPER-GSA: 1975). Second, we made an arbitrary decision to consider as "traditionally female" any category that included at least 3% of the women in the Army on the date (31 December 1973) we were using as a baseline. Third, we made an arbitrary decision to consider as "not traditionally female" any category which (a) included at least one MOS open to women on our baseline date but which (b) included less than 1% of the total number of women in the Army.

Table 1

Percentage and Number of Enlisted Women in Traditional and Nontraditional MOS Categories by Year

MOS category	Year 1973		1974		1975	
Traditional						
Administration	36.0	(4,830)	33.6	(7,650)	30.1	(9,327)
Medical	32.7	(4,377)	26.5	(6,035)	21.8	(6,739)
Telecommunications and audiovisual	12.0	(1,603)	11.9	(2,703)	12.2	(3,785)
Supply	4.6	(616)	5.9	(1,335)	9.0	(2,790)
Automatic data processing	3.0	(401)	2.9	(671)	1.2	(382)
Total	88.3	(11,827)	80.0	(18,394)	74.3	(23,023)
Nontraditional						
Ammunition	*	(0)	.1	(27)	.6	(181)
Ballistic missile repair	*	(0)	*	(4)	*	(11)
Chemical	*	(0)	.1	(20)	.2	(79)
Combat surveillance and target acquisition	*	(0)	*	(8)	.1	(23)
Field services	*	(0)	.2	(40)	.2	(73)
Power production	*	(1)	.3	(63)	.7	(219)
Wire antenna and central office	*	(1)	.1	(29)	.4	(124)
General engineering	*	(3)	.2	(56)	.6	(200)
Topographic engineering and map production	.2	(28)	.5	(123)	.6	(188)
Air defense artillery	.3	(37)	.5	(118)	.4	(112)
Maintenance[a]	.3	(40)	1.4	(316)	4.2	(1,294)
Law enforcement	.5	(67)	3.7	(848)	4.1	(1,263)
Total	1.3	(177)	7.3	(1,652)	12.1	(3,767)

Note. The percentage for the MOS categories is based on the total number of enlisted women in the Army not in Basic Training as of 31 December for that particular year and who were listed as having a primary MOS. The actual number of women on which these percentages are derived is 13,397 (1973), 22,749 (1974), and 30,965 (1975). The figures in parentheses are the actual number of women in that classification.

[a]Maintenance includes all the MOS within each of the following classifications: air-defense missile maintenance, aviation maintenance, combat missile maintenance, electrical/electronic equipment maintenance, field and area communication maintenance, fixed plant communication maintenance, intercept equipment maintenance, mechanical maintenance, and nonintegrated radar maintenance.

*Less than .1%.

jobs (particularly in nontraditional jobs), it is worth asking how Army personnel are likely to react to this development.

INVESTIGATION OF SOLDIERS' BELIEFS ABOUT JOB APPROPRIATENESS

Source of the Data Reported Here

In January 1974 we administered a 174-item questionnaire to a combined sample of some 800 soldiers at three U.S. Army installations (Fort Dix, N.J.; Fort Lewis, Wash.; and Fort Meade, Md.). From this group, 721 usable questionnaires (approximately the same number from each of the three posts) were obtained. The purpose of this effort was to test the then-current version of an instrument[3] we were constructing to measure sex-role attitudes in the Army. Examination of the results, however, suggested that some of the data might also be informative about substantive matters (e.g., whether in 1974 soldiers thought certain jobs were appropriate for women) and provide a basis for predicting immediate reactions to the Army's increasing utilization of women in traditionally male roles. With this possibility in mind, we reanalyzed some of the data.

Description of the Sample

The sample included 540 men (75%) and 181 women (25%), of which 401 were officers (56%) and 320 were enlisted (44%). The sample design was constructed to include both white and nonwhite respondents and to include installations that varied in type and that were geographically dispersed. At each installation, our instructions were that respondents were to be random samples from the specified populations, selected on the basis of the final digits of their social security numbers. We were unable to determine the extent to which the local action officers departed from these instructions, but our conversations with these officers indicated that such departures, if any, were minor. As a final bit of information about the characteristics of the sample, we note that approximately 52% (47% of the men and 66% of the women)[4] either agreed or strongly agreed with the statement "I think I will leave the Army before I retire." Forty-six percent (51% of the men and 44% of the women) either disagreed or strongly disagreed. There is thus the suggestion that a substantial fraction of our sample was considering making the Army a career.

---

[3]This version of the instrument was developed by Barry Collins and Peter Bentler.

[4]This 47% "getting out" figure for men is similar to the figures obtained in other ARI studies conducted about the same time. We have no comparable figures for women.

Results

Among the items included in the questionnaire was a set that asked about job appropriateness. The respondent was presented with a list of 24 jobs and was asked to indicate, for each job, whether he/she did or did not think it was appropriate for women. Table 2 shows the jobs ranked according to the frequency with which respondents judged them appropriate for women. The table shows the overall frequencies of endorsement and also the separate frequencies of endorsement by rank and sex. The overall pattern is consistent with what one would expect: higher frequencies of endorsement for traditional or conventional jobs (e.g., cook, human relations officer, radar technician) and lower frequencies of endorsement for nontraditional or unconventional jobs (e.g., welder, diesel mechanic, rifle-carrying infantry foot soldier). Perhaps the most striking thing about the table as a whole is the fact that of all the jobs listed, only one (rifle-carrying infantry foot soldier) was consistently judged by the majority of respondents to be inappropriate for women.[5] All the other jobs, including one that requires exercising command authority over men (company commander in a mixed-sex company) and several that potentially involve physical danger or violence (e.g., MP-guard duty, helicopter pilot, bomb disposal specialist) were judged appropriate for women by the majority of respondents of both sexes.

Officer-Enlisted Comparisons. For each of the 24 jobs, a comparison was made between the percentage of officers and the percentage of enlisted who judged the job appropriate for women. In every case but one ("company commander in a mixed-sex company"), it was the officers who more often considered the job appropriate; with few exceptions, none of them statistically significant, the pattern held up even when the comparisons were controlled for sex of the respondents. This finding is consistent with the results reported in two recent studies of the military (Fuller, 1973).[6] There were 18 jobs (out of 24) on which the officers and enlisted differed significantly (all $ps < .05$),[7] with the officers more often judging the jobs appropriate than the enlisted (see Table 3). An explanation that immediately suggests itself for these officer-enlisted differences is the average difference in educational level between the two groups: The majority of officers have attended or graduated from college, while the majority of enlisted have not.

---

[5] Unfortunately, we have no data on how many soldiers think this job is inappropriate for men.

[6] Also, an unpublished study by the U.S. Army Military Personnel Center, Washington, D.C.

[7] Statistical comparisons reported in this paper are based on two-tailed difference-of-proportions tests.

Table 2

Percentage of Respondents Perceiving Jobs as Appropriate for Women, Overall, by Rank, and by Sex

Job	Overall (N = 721)	Officers (N = 401)	Enlisted (N = 320)	Men (N = 540)	Women (N = 181)
Cook	98	99	98	99	97
Social worker	98	99	96**	98	99
Human relations officer	97	99	96**	97	99
Lawyer	96	97	93**	95	98
Band leader	96	97	95	96	96
Statistician	95	97	93**	96	92**
General's aide	91	92	91	91	92
Radar technician	90	95	85***	91	87
Bartender	86	88	83*	88	79**
Butcher	83	86	80*	86	76***
Truck driver	82	85	79*	81	84
Navigator	82	86	78**	81	86
Janitor	81	87	73***	82	77
Parachute rigger	80	85	73***	81	78
Plumber	77	83	68***	75	81
Welder	76	82	68***	76	74
Ammunition supply person	75	80	70***	76	74
Company commander in a mixed-sex company	74	74	76	71	83***
Diesel mechanic	69	76	59***	67	74
MP-guard duty	69	71	68	68	78**
Helicopter pilot	66	69	62**	62	78***
Jet pilot	60	63	55**	55	76***
Bomb disposal specialist	55	61	48***	51	67***
Rifle-carrying infantry foot soldier	28	30	27	24	42***

*p < .05, two-tailed difference-of-proportions test.
**p < .01, two-tailed difference-of-proportions test.
***p < .001, two-tailed difference-of-proportions test.

Table 3

Difference in the Percentage of Officers and Enlisted Personnel Who Judged Specified Jobs To Be Appropriate for Women

Job	Percentage difference[a]	p[b]
Social worker	+4	.01
Human relations officer	+3	.01
Lawyer	+4	.01
Statistician	+4	.01
Radar technician	+10	.001
Bartender	+6	.05
Butcher	+6	.05
Truck driver	+6	.05
Navigator	+8	.01
Janitor	+14	.001
Parachute rigger	+12	.001
Plumber	+14	.001
Welder	+13	.001
Ammunition supply person	+11	.01
Diesel mechanic	+17	.001
Helicopter pilot	+7	.01
Jet pilot	+8	.01
Bomb disposal specialist	+14	.001

[a] Percentages shown are for those jobs (N = 18) for which the difference was statistically significant ($p < .05$). Plus sign (+) indicates that more officers than enlisted viewed the job as appropriate for women.

[b] p is determined by two-tailed difference-of-proportions test.

Most studies--certainly most of those since 1972 (Ferree, 1974)--have shown a positive relationship between educational attainment and liberalism in sex-role attitudes (Erskine, 1971; Ferree, 1974; Mason & Bumpass, 1975; Yankelovich, 1974); it seemed reasonable to suppose that the officer-enlisted difference observed here might be explained in this way. For each of the 18 jobs, therefore, we compared officers and enlisted at each of the two levels of education (high school graduate and 1 to 3 years of college) for which we had enough respondents to provide an interpretable comparison, making 36 comparisons in all (see Table 4). The result of introducing this control for education

Table 4

Differences in the Percentages of Officer and Enlisted Personnel Who Judged Jobs Appropriate for Women, Shown Separately for the Total Sample, for High School Graduates, and for Those With 1 to 3 Years of College

Job	Total sample[a] (401 officers and 320 enlisted)	High school graduates[b] (81 officers and 213 enlisted)	1 to 3 years of college[b] (75 officers and 67 enlisted)
Social worker	+4	+3	0
Human relations officer	+3	+2	0
Lawyer	+4	-2	-2
Statistician	+4	-5	-1
Radar technician	+10	0	+5
Bartender	+6	-11	0
Butcher	+6	-10	-10
Truck driver	+6	-6	+2
Navigator	+8	-1	0
Janitor	+14	-2	+8
Parachute rigger	+12	-11	+7
Plumber	+14	-2	+5
Welder	+13	+2	-2
Ammunition supply person	+11	-6	+5
Diesel mechanic	+17	+5	+5
Helicopter pilot	+7	-6	+4
Jet pilot	+8	-6	+3
Bomb disposal specialist	+14	-3	+3

Note. Percentages shown are for those jobs (N = 18) on which the difference was statistically significant in the total sample. Plus sign (+) indicates that more officers than enlisted viewed the job as appropriate for women; minus sign (-) indicates the reverse.

[a]Includes 35 (7 officers and 28 enlisted) who had not graduated from high school and 250 (238 officers and 12 enlisted) who had 4 or more years of college.

[b]None of these differences is significant (all *ps* > .05).

was in every case either to reduce in magnitude or to reverse in direction the difference previously observed. In only one case ("diesel mechanic") was the original officer-enlisted difference retained in both the high school and the college subgroups; neither this difference nor indeed any of the other differences was significant (all *p*s > .05).

The rather striking officer-enlisted differences observed in this study, therefore, seem largely explainable in terms of the difference in average level of education between the two groups. The greater the number of years of formal education, the more likely these soldiers were to say they considered the jobs appropriate for women.

Male-Female Comparisons. A comparison of the percentage of men and women who judged each of the 24 jobs appropriate for women showed not only that the differences vary in magnitude, but also that they are not always in the same direction (see Table 2). There are nine jobs (see Table 5) on which males and females differed significantly. In six cases (company commander in a mixed-sex company, MP-guard duty, helicopter pilot, jet pilot, bomb disposal specialist, and rifle-carrying infantry foot soldier) women judged the job appropriate for women more often than the men did; in three cases (statistician, bartender, and butcher) it was the other way around.

Table 5

Difference in the Percentage of Men and Women Who Judged Jobs To Be Appropriate for Women, Shown for Those Jobs (N = 9) for Which the Difference Was Significant

Job	Percentage difference[a]	*p*[b]
Statistician	+5	.01
Bartender	+9	.01
Butcher	+10	.001
Company commander in a mixed-sex company	-12	.001
MP-guard duty	-10	.01
Helicopter pilot	-15	.001
Jet pilot	-20	.001
Bomb disposal specialist	-16	.001
Rifle-carrying infantry foot soldier	-18	.001

[a] Plus sign (+) indicates that more men than women viewed the job as appropriate for women; minus sign (-) indicates the reverse.

[b] *p* is determined by two-tailed difference-of-proportions test.

Since the education distribution is somewhat different for the men and the women in our sample[8] (as in the Army as a whole), and since the officer-enlisted differences in endorsement frequency were largely eliminated by controlling for education, we examined the sex differences in endorsement frequency with education controlled at the two levels (high school graduate and 1 or more years of college) for which we had enough respondents to provide interpretable comparisons (see Table 6). The pattern of these differences, however, was unchanged. Some of the differences were larger and some of them were smaller, but the only clear change was a general lowering of the p values (which one expects from a reduction in sample size). We conclude that the men and women in our sample, like men and women elsewhere (Coye, Denby, Hooper, & Mullen, 1973; Erskine, 1971; Haavio-Mannila, 1972; McCune, 1970; Peters, Terborg, & Taynor, 1974; Rosenkrantz, Bee, Vogel, & Broverman, 1968; Savell & Woelfel, in press), tend to differ in their sex-role attitudes and that this difference is not explained by level of education. For a discussion of some exceptions, see Ferree (1974), Schreiber (1975), and Savell and Woelfel (in press). In addition, several observations may be made.

First (see Table 6), going to college appears to increase the magnitude of the "usual" sex differences (i.e., differences in which women show greater acceptance of sex-role diversity than men) and to reduce the magnitude of the "unusual" ones (i.e., differences in the opposite direction), a pattern consistent with that observed in several other studies (Ferree, 1974, Table 3; Yankelovich, 1974).

Second, there appear to be some areas in which women are less accepting of sex-role diversity than men, although this pattern seems to appear only among those with fewer years of formal education (see also Ferree, 1974, Table 3).

Third, all the jobs that were more often judged appropriate by the women than by the men are primarily military or military-type jobs. Thus, while these jobs, with one exception (rifle-carrying infantry foot soldier), were endorsed by the majority of soldiers of both sexes, the women were less likely to have doubts on this score than the men were.

Beliefs About Job Appropriateness and Intention to Leave the Army. As indicated above, a sizable fraction of our sample implied, in response to one questionnaire item, that they were considering making the Army a career. It seemed worthwhile, therefore, to find out whether the respondents' expectations in this regard were related to their views about job appropriateness. If the minority who hold traditional views about job appropriateness were found disproportionately among those staying in the Army, and if the majority who hold more

---

[8] Among the men there were 34 (6.3%) who had not graduated from high school, but among the women there was only 1 (.6%).

Table 6

Differences in the Percentages of Men and Women Who Judged the Jobs Appropriate for Women, Shown Separately for the Total Sample, for High School Graduates, and for Those With 1 or More Years of College

Job	Total sample[a] (540 men, 181 women)	High school graduates (212 men, 83 women)	1 or more years of college (243 men, 97 women)
Statistician	+5**	+7.4*	+2.1
Bartender	+9**	+17.4**	+3.1
Butcher	+10***	+12.7*	+6.6
Company commander in a mixed-sex company	-12***	-5.9	-15.7**
MP-guard duty	-10**	-11.0	-9.4
Helicopter pilot	-15***	-12.4	-18.7***
Jet pilot	-20***	-17.6**	-23.7***
Bomb disposal specialist	-16***	-11.5	-19.0***
Rifle-carrying infantry foot soldier	-18***	-16.9**	-20.5***

Note. Percentages shown are for those jobs (N = 9) on which the difference was statistically significant in the total sample. Plus sign (+) indicates that more men than women viewed the job as appropriate for women; minus sign (-) indicates the reverse.

[a]Includes 86 (1 woman and 85 men) who had not graduated from high school.

*$p < .05$.
**$p < .01$.
***$p < .001$.

contemporary views were found disproportinately among those getting out, the day-to-day running of the Army would be left to those whose attitudes are not consistent with contemporary social norms in this area. Under these circumstances, we would expect that many talented women would avoid the Army who otherwise would not. Women joining the Army would be those who were not (or not too much) offended by the restrictions placed upon them (Goldman, 1973). If, on the other hand, those with contemporary sex-role attitudes were no more likely to leave the Army than persons whose attitudes in this area are more traditional, women should find in the Army little more resistance to fulfilling their aspirations than they find outside the Army.

To check on this relationship, we correlated the job appropriateness responses (yes/no) with response to the item "I think I will leave the Army before I retire" (agree/disagree).[9] These correlations clustered around zero. There was no evidence that those with more contemporary sex-role attitudes are more likely to leave the Army than are those whose attitudes in this area are more traditional.

Beliefs About Job Appropriateness and Time in the Army. The variable "length of time in the Army" is obviously closely related to two other variables--"intention to stay in the Army" and "paygrade within rank." These two variables were shown to exhibit little or no relationship to soldiers' judgments of job appropriateness; we therefore expect to find little or no relationship between this latter variable and "length of time in the Army." Consistent with this expectation, the correlations clustered around zero and provided no evidence that length of time in the Army is related to the attitudes measured here.[10]

Final Note Concerning the Validity of the Data

Perhaps one of the most striking aspects of the data is the extent to which respondents expressed favorable attitudes toward the idea of employing women in traditionally male jobs. For all job categories except one (rifle-carrying infantry foot soldier), the majority said they thought the jobs were appropriate for women. A question to be raised, then, is whether these data are valid. One possibility is

---

[9] This item (leave/stay) correlated in the expected direction with respondent age (r = .48) and length of service (r = .54).

[10] This finding (of no relationship) is consistent with one of the findings from a recent national sample survey of young men and women conducted for ARI by the University of Michigan Survey Research Center. The data from that survey show essentially no relationship between measures (N = 9) of interest in the Army/favorableness toward the Army and a measure of attitudes toward "the women's liberation movement." We are indebted to E. M. Schreiber for conducting this particular analysis and calling the results to our attention.

that in spite of precautions taken, a biased ("nontraditional") sample was obtained. This possibility cannot be rejected completely, but data bearing on it are available from an Army-wide sample survey (N = 6,533) conducted by the Military Personnel Center at about the same time. Included among the questions was, "What is your reaction to the increase in the number of MOS open to women in the Army?" Examination of the results indicated favorable reactions from 90% of the female officers, 77% of the male officers, 85% of the female enlisted, and 64% of the male enlisted. These percentages are not greatly different from those obtained in the study reported here.

A second possibility is that prior to the survey the Army had been carrying out an intense troop indoctrination program aimed at changing soldiers' attitudes regarding the utilization of women. Examination of troop training programs existing at the time, however, provides no evidence that such a program (certainly not one of the magnitude and intensity required to change strongly held attitudes in a large population) was in existence.

A third possibility is that the respondents were trying to represent themselves as being more "liberal" than they really were. It is possible, for example, that at the time of this survey the dominant social norms in the Army were those of male-female egalitarianism and that the attitudes expressed in the survey constitute a sort of compromise between the respondents' true ("conservative") attitudes and the ("liberal") attitudes they attribute to others. As reported elsewhere (Savell & Woelfel, 1976), however, other data from the same survey show quite clearly that the respondents described themselves as less traditional than others of their own age and sex. An alternative interpretation of this possibility is that the idea of male-female egalitarianism (like the idea of white-black egalitarianism) has achieved something of the status of a dominant social value. If this is indeed the case, and if being egalitarian in sex-role attitudes is indeed socially valued by Army personnel, we would expect to find more and more soldiers changing their attitudes in the future to bring them in line with their values, e.g., on this issue becoming more and more egalitarian.

REFERENCES

Coates, C. H., & Pellegrini, R. J. Military sociology: a study of military institutions and military life (pp. 354-72). University Park, Md.: The Social Sciences Press, 1965.

Coye, B., Denby, S. P., Hooper, C. C., & Mullen, K. A. Is there room for women in Navy management: an attitudinal survey. Naval War College Review January 1973, 69-87.

Erskine, H. The polls: women's role. Public Opinion Quarterly, 1971, 35, 275-290.

Ferree, M. M. A woman for president? Public Opinion Quarterly, 1974, 38, 390-399.

Fuller, C. H. The role of women in the Navy: a study of attitudes and scale development. Washington, D.C.: Navy Personnel Research and Development Laboratory, June 1973.

Goldman, N. The changing role of women in the armed forces. American Journal of Sociology, 1973, 78, 892-911.

Haavio-Mannila, Elina. Sex-role attitudes in Finland, 1966-1970. Journal of Social Issues, 1972, 28, 93-110.

Mason, K. O., & Bumpass, L. L. U.S. women's sex-role ideology, 1970. American Journal of Sociology, 1975, 80.

McCune, S. Thousands reply to opinionnaire; many document cases of discrimination. AAUW Journal, May 1970.

Peters, L. H., Terborg, J. R., & Taynor, J. Women as Managers Scale (WAMS): a measure of attitudes toward women in management positions. Abstracted in the JSAS Catalog of Selected Documents in Psychology, 1974, 4, 27.

Rosenkrantz, P., Bee, H., Vogel, S., & Broverman, I. Sex-role stereotypes and self-concepts in college students. Journal of Consulting and Clinical Psychology, 1968, 32, 287-295.

Savell, J. M., & Woelfel, J. C. Attribution of gender-role egalitarianism to self and to others: some evidence regarding two kinds of discrepancy. Paper presented at the annual meeting of the Eastern Psychological Association, New York City, April 1976.

Savell, J. M., & Woelfel, J. C. A 7-item scale to measure sex-role attitudes in the Army. ARI technical paper, in press.

Schreiber, E. M. The social bases of opinions on woman's role in Canada. Canadian Journal of Sociology, 1975, 1, 61-74.

Spence, J. T., & Helmreich, R. The Attitudes Toward Women Scale: an objective instrument to measure attitudes toward the rights and roles of women in contemporary society. Abstracted in the JSAS Catalog of Selected Documents in Psychology, 1972, 2, 66.

Treadwell, M. E. U.S. Army in World War II: special studies--the Women's Army Corps. Washington, D.C.: Office of the Chief of Military History, Department of the Army, 1954.

Yankelovich, D. The new morality: a profile of American youth in the 70s. New York: McGraw-Hill, 1974.

ARI Distribution List

4 OASD (M&RA)
2 HQDA (DAMI-CSZ)
1 HQDA (DAPE-PBR)
1 HQDA (DAMA-AR)
1 HQDA (DAPE-HRE-PO)
1 HQDA (SGRD-ID)
1 HQDA (DAMI-DOT-C)
1 HQDA (DAPC-PMZ-A)
1 HQDA (DACH-PPZ-A)
1 HQDA (DAPE-HRE)
1 HQDA (DAPE-MPO-C)
1 HQDA (DAPE-DW)
1 HQDA (DAPE-HRL)
1 HQDA (DAPE-CPS)
1 HQDA (DAFD-MFA)
1 HQDA (DARD-ARS-P)
1 HQDA (DAPC-PAS-A)
1 HQDA (DUSA-OR)
1 HQDA (DAMO-RQR)
1 HQDA (DASG)
1 HQDA (DA10-PI)
1 Chief, Consult Div (DA-OTSG), Adelphi, MD
1 Mil Asst, Hum Res, ODDR&E, OAD (E&LS)
1 HQ USARAL, APO Seattle, ATTN: ARAGP-R
1 HQ First Army, ATTN: AFKA-OI-TI
2 HQ Fifth Army, Ft Sam Houston
1 Dir, Army Stf Studies Ofc, ATTN: OAVCSA (DSP)
1 Ofc Chief of Stf, Studies Ofc
1 DCSPER, ATTN: CPS/OCP
1 The Army Lib, Pentagon, ATTN: RSB Chief
1 The Army Lib, Pentagon, ATTN: ANRAL
1 Ofc, Asst Sect of the Army (R&D)
1 Tech Support Ofc, OJCS
1 USASA, Arlington, ATTN: IARD-T
1 USA Rsch Ofc, Durham, ATTN: Life Sciences Dir
2 USARIEM, Natick, ATTN: SGRD-UE-CA
1 USATTC, Ft Clayton, ATTN: STTC-MO-A
1 USAIMA, Ft Bragg, ATTN: AISU-CTD-OM
1 USAIMA, Ft Bragg, ATTN: Marquat Lib
1 US WAC Ctr & Sch, Ft McClellan, ATTN: Lib
1 US WAC Ctr & Sch, Ft McClellan, ATTN: Trng Dir
1 USA Quartermaster Sch, Ft Lee, ATTN: ATSM-TE
1 Intelligence Material Dev Ofc, EWL, Ft Holabird
1 USA SE Signal Sch, Ft Gordon, ATTN: ATSO-EA
1 USA Chaplain Ctr & Sch, Ft Hamilton, ATTN: ATSC-TE-RD
1 USATSCH, Ft Eustis, ATTN: Educ Advisor
1 USA War College, Carlisle Barracks, ATTN: Lib
2 WRAIR, Neuropsychiatry Div
1 DLI, SDA, Monterey
1 USA Concept Anal Agcy, Bethesda, ATTN: MOCA-MR
1 USA Concept Anal Agcy, Bethesda, ATTN: MOCA-JF
1 USA Arctic Test Ctr, APO Seattle, ATTN: STEAC-PL-MI
1 USA Arctic Test Ctr, APO Seattle, ATTN: AMSTE-PL-TS
1 USA Armament Cmd, Redstone Arsenal, ATTN: ATSK-TEM
1 USA Armament Cmd, Rock Island, ATTN: AMSAR-TDC
1 FAA-NAFEC, Atlantic City, ATTN: Library
1 FAA-NAFEC, Atlantic City, ATTN: Human Engr Br
1 FAA Aeronautical Ctr, Oklahoma City, ATTN: AAC-44D
2 USA Fld Arty Sch, Ft Sill, ATTN: Library
1 USA Armor Sch, Ft Knox, ATTN: Library
1 USA Armor Sch, Ft Knox, ATTN: ATSB-DI-E
1 USA Armor Sch, Ft Knox, ATTN: ATSB-DT-TP
1 USA Armor Sch, Ft Knox, ATTN: ATSB-CD-AD
2 HQUSACDEC, Ft Ord, ATTN: Library
1 HQUSACDEC, Ft Ord, ATTN: ATEC-EX-E Hum Factors
2 USAEEC, Ft Benjamin Harrison, ATTN: Library
1 USAPACDC, Ft Benjamin Harrison, ATTN: ATCP-HR
1 USA Comm-Elect Sch, Ft Monmouth, ATTN: ATSN-EA
1 USAEC, Ft Monmouth, ATTN: AMSEL-CT-HDP
1 USAEC, Ft Monmouth, ATTN: AMSEL-PA-P
1 USAEC, Ft Monmouth, ATTN: AMSEL-SI-CB
1 USAEC, Ft Monmouth, ATTN: C, Facl Dev Br
1 USA Materials Sys Anal Agcy, Aberdeen, ATTN: AMXSY-P
1 Edgewood Arsenal, Aberdeen, ATTN: SAREA-BL-H
1 USA Ord Ctr & Sch, Aberdeen, ATTN: ATSL-TEM-C
2 USA Hum Engr Lab, Aberdeen, ATTN: Library/Dir
1 USA Combat Arms Trng Bd, Ft Benning, ATTN: Ad Supervisor
1 USA Infantry Hum Rsch Unit, Ft Benning, ATTN: Chief
1 USA Infantry Bd, Ft Benning, ATTN: STEBC-TE-T
1 USASMA, Ft Bliss, ATTN: ATSS-LRC
1 USA Air Def Sch, Ft Bliss, ATTN: ATSA-CTD-ME
1 USA Air Def Sch, Ft Bliss, ATTN: Tech Lib
1 USA Air Def Bd, Ft Bliss, ATTN: FILES
1 USA Air Def Bd, Ft Bliss, ATTN: STEBD-PO
1 USA Cmd & General Stf College, Ft Leavenworth, ATTN: Lib
1 USA Cmd & General Stf College, Ft Leavenworth, ATTN: ATSW-SE-L
1 USA Cmd & General Stf College, Ft Leavenworth, ATTN: Ed Advisor
1 USA Combined Arms Cmbt Dev Act, Ft Leavenworth, ATTN: DepCdr
1 USA Combined Arms Cmbt Dev Act, Ft Leavenworth, ATTN: CCS
1 USA Combined Arms Cmbt Dev Act, Ft Leavenworth, ATTN: ATCASA
1 USA Combined Arms Cmbt Dev Act, Ft Leavenworth, ATTN: ATCACO-E
1 USA Combined Arms Cmbt Dev Act, Ft Leavenworth, ATTN: ATCACC-CI
1 USAFCOM, Night Vision Lab, Ft Belvoir, ATTN: AMSEL-NV-SD
1 USA Computer Sys Cmd, Ft Belvoir, ATTN: Tech Library
1 USAMERDC, Ft Belvoir, ATTN: STSFB-DQ
1 USA Eng Sch, Ft Belvoir, ATTN: Library
1 USA Topographic Lab, Ft Belvoir, ATTN: ETL-TD-S
1 USA Topographic Lab, Ft Belvoir, ATTN: STINFO Center
1 USA Topographic Lab, Ft Belvoir, ATTN: ETL-GSL
1 USA Intelligence Ctr & Sch, Ft Huachuca, ATTN: CTD-MS
1 USA Intelligence Ctr & Sch, Ft Huachuca, ATTN: ATS-CTD-MS
1 USA Intelligence Ctr & Sch, Ft Huachuca, ATTN: ATSI-TE
1 USA Intelligence Ctr & Sch, Ft Huachuca, ATTN: ATSI-TEX-GS
1 USA Intelligence Ctr & Sch, Ft Huachuca, ATTN: ATSI-CTS-OR
1 USA Intelligence Ctr & Sch, Ft Huachuca, ATTN: ATSI-CTD-DT
1 USA Intelligence Ctr & Sch, Ft Huachuca, ATTN: ATSI-CTD-CS
1 USA Intelligence Ctr & Sch, Ft Huachuca, ATTN: DAS/SRD
1 USA Intelligence Ctr & Sch, Ft Huachuca, ATTN: ATSI-TEM
1 USA Intelligence Ctr & Sch, Ft Huachuca, ATTN: Library
1 CDR, HQ Ft Huachuca, ATTN: Tech Ref Div
2 CDR, USA Electronic Prvg Grd, ATTN: STEEP-MT-S
1 HQ, TCATA, ATTN: Tech Library
1 HQ, TCATA, ATTN: AT CAT-OP-O, Ft Hood
1 USA Recruiting Cmd, Ft Sheridan, ATTN: USARCPM-P
1 Senior Army Adv., USAFAGOD/TAC, Elgin AF Aux Fld No. 9
1 HQ, USARPAC, DCSPER, APO SF 96558, ATTN: GPPE SE
1 Stimson Lib, Academy of Health Sciences, Ft Sam Houston
1 Marine Corps Inst., ATTN: Dean-MCI
1 HQ, USMC, Commandant, ATTN: Code MTMT
1 HQ, USMC, Commandant, ATTN: Code MPI-20-28
2 USCG Academy, New London, ATTN: Admission
2 USCG Academy, New London, ATTN: Library
1 USCG Training Ctr, NY, ATTN: CO
1 USCG Training Ctr, NY, ATTN: Educ Svc Ofc
1 USCG, Psychol Res Br, DC, ATTN: GP 1/62
1 HQ Mid-Range Br, MC Det, Quantico, ATTN: P&S Div

1 US Marine Corps Liaison Ofc, AMC, Alexandria, ATTN: AMCGS-F
1 USATRADOC, Ft Monroe, ATTN: ATRO-ED
6 USATRADOC, Ft Monroe, ATTN: ATPR-AD
1 USATRADOC, Ft Monroe, ATTN: ATTS-EA
1 USA Forces Cmd, Ft McPherson, ATTN: Library
2 USA Aviation Test Bd, Ft Rucker, ATTN: STEBG-PO
1 USA Agcy for Aviation Safety, Ft Rucker, ATTN: Library
1 USA Agcy for Aviation Safety, Ft Rucker, ATTN: Educ Advisor
1 USA Aviation Sch, Ft Rucker, ATTN: PO Drawer O
1 HQUSA Aviation Sys Cmd, St Louis, ATTN: AMSAV-ZDR
2 USA Aviation Sys Test Act., Edwards AFB, ATTN: SAVTE-T
1 USA Air Def Sch, Ft Bliss, ATTN: ATSA TEM
1 USA Air Mobility Rsch & Dev Lab, Moffett Fld, ATTN: SAVDL-AS
1 USA Aviation Sch, Res Trng Mgt, Ft Rucker, ATTN: ATST-T-RTM
1 USA Aviation Sch, CO, Ft Rucker, ATTN: ATST-D-A
1 HQ, DARCOM, Alexandria, ATTN: AMXCD-TL
1 HQ, DARCOM, Alexandria, ATTN: CDR
1 US Military Academy, West Point, ATTN: Serials Unit
1 US Military Academy, West Point, ATTN: Ofc of Milt Ldrshp
1 US Military Academy, West Point, ATTN: MAOR
1 USA Standardization Gp, UK, FPO NY, ATTN: MASE-GC
1 Ofc of Naval Rsch, Arlington, ATTN: Code 452
3 Ofc of Naval Rsch, Arlington, ATTN: Code 458
1 Ofc of Naval Rsch, Arlington, ATTN: Code 450
1 Ofc of Naval Rsch, Arlington, ATTN: Code 441
1 Naval Aerospc Med Res Lab, Pensacola, ATTN: Acous Sch Div
1 Naval Aerospc Med Res Lab, Pensacola, ATTN: Code L51
1 Naval Aerospc Med Res Lab, Pensacola, ATTN: Code L5
1 Chief of NavPers, ATTN: Pers-OR
1 NAVAIRSTA, Norfolk, ATTN: Safety Ctr
1 Nav Oceanographic, DC, ATTN: Code 6251, Charts & Tech
1 Center of Naval Anal, ATTN: Doc Ctr
1 NavAirSysCom, ATTN: AIR-5313C
1 Nav BuMed, ATTN: 713
1 NavHelicopterSubSqua 2, FPO SF 96601
1 AFHRL (FT) Williams AFB
1 AFHRL (TT) Lowry AFB
1 AFHRL (AS) WPAFB, OH
2 AFHRL (DOJZ) Brooks AFB
1 AFHRL (DOJN) Lackland AFB
1 HQUSAF (INYSD)
1 HQUSAF (DPXXA)
1 AFVTG (RD) Randolph AFB
3 AMRL (HE) WPAFB, OH
2 AF Inst of Tech, WPAFB, OH, ATTN: ENE/SL
1 ATC (XPTD) Randolph AFB
1 USAF AeroMed Lib, Brooks AFB (SUL 4), ATTN: DOC SEC
1 AFOSR (NL), Arlington
1 AF Log Cmd, McClellan AFB, ATTN: ALC/DPCRB
1 Air Force Academy, CO, ATTN: Dept of Bel Scn
5 NavPers & Dev Ctr, San Diego
2 Navy Med Neuropsychiatric Rsch Unit, San Diego
1 Nav Electronic Lab, San Diego, ATTN: Res Lab
1 Nav TrngCen, San Diego, ATTN: Code 9000-Lib
1 NavPostGraSch, Monterey, ATTN: Code 55Aa
1 NavPostGraSch, Monterey, ATTN: Code 2124
1 NavTrngEquipCtr, Orlando, ATTN: Tech Lib
1 US Dept of Labor, DC, ATTN: Manpower Admin
1 US Dept of Justice, DC, ATTN: Drug Enforce Admin
1 Nat Bur of Standards, DC, ATTN: Computer Info Section
1 Nat Clearing House for MH-Info, Rockville
1 Denver Federal Ctr, Lakewood, ATTN: BLM
12 Defense Documentation Center
4 Dir Psych, Army Hq, Russell Ofcs, Canberra
1 Scientific Advsr, Mil Bd, Army Hq, Russell Ofcs, Canberra
1 Mil and Air Attache, Austrian Embassy
1 Centre de Recherche Des Facteurs, Humaine de la Defense Nationale, Brussels
2 Canadian Joint Staff Washington
1 C/Air Staff, Royal Canadian AF, ATTN: Pers Std Anal Br
3 Chief, Canadian Def Rsch Staff, ATTN: C/CRDS(W)
4 British Def Staff, British Embassy, Washington
1 Def & Civil Inst of Enviro Medicine, Canada
1 AIR CRESS, Kensington, ATTN: Info Sys Br
1 Militaerpsykologisk Tjeneste, Copenhagen
1 Military Attache, French Embassy, ATTN: Doc Sec
1 Medecin Chef, C.E.R.P.A.-Arsenal, Toulon/Naval France
1 Prin Scientific Off, Appl Hum Engr Rsch Div, Ministry of Defense, New Delhi
1 Pers Rsch Ofc Library, AKA, Israel Defense Forces
1 Ministeris van Defensie, DOOP/KL Afd Sociaal Psychologische Zaken, The Hague, Netherlands